

7. (Cancelled)

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19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23.(Allowed) A gravity-sensitive latch comprising:

a housing;

a handle pivotally secured to said housing, said handle pivoting between a latched position and an unlatched position;

a pawl pivotally secured to said housing, said pawl being dimensioned and configured to engage a keeper, said pawl pivoting between a latched position and an unlatched position;

a pawl-retaining arm pivoting between a latched position and an unlatched position;

a pendulum pivotally secured to said pawl-retaining arm, said pendulum being dimensioned and configured to abut said handle, said pendulum pivoting between a latched position and an unlatched position; and

means for pivotally securing said housing and said pawl-retaining arm,

wherein said pawl includes an upper forward arm and a lower forward arm extending toward said handle, a channel between said forward arms, and a third arm extending rearward, said third arm is dimensioned and configured to engage said pawl-retaining arm, said forward arms are dimensioned and configured to secure a keeper, said pawl pivots between said latched position wherein said forward arms are substantially horizontal, and said unlatched position wherein said forward arms point downward.

24.(Allowed) The gravity-sensitive latch according to claim 23, wherein said latch can be actuated when said latch is in a horizontal position, and said latch cannot be actuated when said latch is in a vertical position.

25.(Allowed) The gravity-sensitive latch according to claim 23, wherein said housing is dimensioned and configured to receive a keeper.

26.(Allowed) The gravity-sensitive latch according to claim 23, wherein: said housing includes a front end, a central portion defining a channel dimensioned and configured to receive said pawl and a keeper, and a rear portion having at least one aperture for attachment to said means for pivotally securing said housing and said pawl-retaining arm, said means for pivotally securing said housing and said pawl-retaining arm comprising a pin, said channel dimensioned and configured to pivotally secure said pawl within said housing and

said handle includes a vertical portion, a horizontal portion, and a rear end dimensioned and configured to engage with said front end of said housing.

27.(Allowed) The gravity-sensitive latch according to claim 26, wherein said handle includes a rearward-projecting structure for abutting said pendulum and said handle is biased towards its

latched position by biasing means wherein the engagement portion of said rear end of said handle that engages with said front end of said housing is positioned below said rearward-projecting flange and said biasing means.

28.(Allowed) The gravity-sensitive latch according to claim 23, wherein said handle includes a rearward-projecting structure for abutting said pendulum.

29.(Allowed) The gravity-sensitive latch according to claim 23, wherein said handle includes a stop to prevent travel beyond a predetermined range of motion.

30.(Allowed) The gravity-sensitive latch according to claim 23, wherein said handle is biased towards its latched position.

31.(Allowed) The gravity-sensitive latch according to claim 23, wherein said pawl retaining arm is biased towards its latched position.

32.(Allowed) The gravity-sensitive latch according to claim 23, wherein said paw retaining arm is pivotally secured to said housing at its end adjacent to said pawl.

33.(Allowed) The gravity-sensitive latch according to claim 23, wherein said pendulum has a connection corner, a weighted corner, and an abutment corner dimensioned and configured to abut said handle.

34.(Allowed) The gravity-sensitive latch according to claim 33, wherein said weighted corner extends upward.

35.(Allowed) The gravity-sensitive latch according to claim 33, wherein said weighted corner has greater mass than the remainder of said pendulum.

36.(Allowed) The gravity-sensitive latch according to claim 23, wherein said pawl retaining arm includes a first end having at least one flange defining at least one aperture and a second end dimensioned and configured to engage said pawl, said pendulum has at least one peg protruding from said pendulum, said at least one aperture of said first end is dimensioned and configured to receive said peg of said pendulum.

37. (Cancelled)

38. (Allowed) The gravity-sensitive latch according to claim 23, wherein said pawl is biased towards its unlatched position.

39. (Allowed) The gravity-sensitive latch according to claim 23, wherein said means for pivotally securing said housing and said pawl-retaining arm is a pin.

40. (Allowed) The gravity-sensitive latch according to claim 23, further comprising a keeper adapted for engaging with said pawl.

41. (Reinstated - twice amended) A- The gravity-sensitive latch comprising: of claim 79,

a housing;

wherein said activator member is a button supported for slidable movement relative to said housing, said button secured to said housing;

wherein said gravity-sensitive link is a pendulum operatively connected to said button, said pendulum pivoting between a latched position and an unlatched position; and

wherein said keeper-engaging member is a pawl pivotally secured to said pendulum, said pawl being dimensioned and configured to engage a keeper, said pawl pivoting between a latched position and an unlatched position; and also including

means for pivotally securing said housing and said pawl-retaining arm,

wherein said means for pivotally securing said housing and said pawl pawl-retaining arm is a rod.

42. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein said latch can be actuated when said latch is in a horizontal position, and said latch cannot be actuated when said latch is in a vertical position.

43. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein said housing includes a front end dimensioned and configured for securing to said button, and a rear portion dimensioned and configured for securing to said pawl.

44. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein said button includes a structure for abutting said pendulum.
45. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein said button includes a stop to prevent travel beyond a predetermined range of motion.
46. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein said button is biased away from said housing towards its forward position.
47. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein button is dimensioned and configured to receive a lock.
48. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein said pendulum has a connection corner, a weighted corner, and an abutment corner dimensioned and configured to abut said button.
49. (Reinstated - original) The gravity-sensitive latch according to claim 48, wherein said weighted corner extends upward.
50. (Reinstated - original) The gravity-sensitive latch according to claim 48, wherein said weighted corner has greater mass than the remainder of said pendulum.
51. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein said pawl includes an upper end dimensioned and configured for pivotally securing with said pendulum, a lower end dimensioned and configured to engage a keeper, and a central section dimensioned and configured for pivotally securing with said housing.
52. (Reinstated - original) The gravity-sensitive latch according to claim 51, wherein said pawl pivots between said latched position wherein said lower end is rearward, and said unlatched position wherein said lower end is forward.
53. (Reinstated - original) The gravity-sensitive latch according to claim 41, wherein said pawl is biased towards its latched position.
54. (Cancelled)

55. (Reinstated - original) The gravity-sensitive latch according to claim 41, further comprising a keeper.

56. (Reinstated - original) The gravity-sensitive latch according to claim 55, wherein said keeper is a plate having an opening dimensioned and configured to engage with said pawl.

57. (Reinstated - original) The gravity-sensitive latch according to claim 41, further comprising a lock for preventing actuation of said latch regardless of its orientation.

58. (Previously three times amended) A gravity-sensitive latch comprising:

- a housing;

- a handle secured to said housing;

- a pendulum operatively in communication with said handle, said pendulum pivoting between said operative position and a non-operative position out of communication with said handle under the force of gravity;

- a pawl pivotally connected to said housing for pivoting between a latch position and an unlatch position

- a pawl-retaining arm for engaging or disengaging with said pawl by pivoting between a first position and a second position; and

- means for pivotally securing said housing and said pawl-retaining arm.

59. (Twice amended) A gravity-sensitive latch, comprising:

- a housing;

- a pawl mounted to said housing for movement relative thereto;

- means connected to said pawl for biasing its position;

- a manually operated activator structure mounted to said housing;

- ~~an interlocking~~ means mounted to said housing for selectively engaging said pawl for locking it against movement;

means connected to said ~~interlocking~~ selectively engaging means for biasing its position;
and

~~linking~~ means, having an interposed position and non-interposed position, for transferring the manually operated motion of said activator structure to said ~~interlocking~~ selectively engaging means thereby altering its engagement with said pawl, when said ~~linking~~ transferring means is in its interposed position between said activator structure and said ~~interlocking~~ transferring means;

wherein said linking means is gravity-sensitive to move between its interposed position and its non-interposed position as a function of said housing physical orientation with respect to the earth gravitational force.

60. (Twice amended) A gravity-sensitive latch, comprising:

a housing;

a pawl connected to said housing for movement relative thereto;

means connected to said pawl for biasing its position;

a manually operated activator structure mounted to said housing for movement; and

~~linking~~ means, having an interposed state and non-interposed state, for transferring the manually operated motion of said activator structure to said pawl when said ~~linking~~ means is in its interposed state;

wherein said ~~linking~~ transferring means is gravity-sensitive to move between its interposed state and its non-interposed state.

61.(Amended) The gravity-sensitive latch of claim 59, wherein said ~~linking~~ transferring means moves to its interposed position when said housing is moved to a horizontal position and wherein said ~~linking~~ transferring means moves to its non-interposed position when said housing is moved to a vertical position.

62. (Twice amended) The gravity-sensitive latch of claim 60, where in said linking transferring means moves to its interposed state when said housing is moved to a horizontal position and wherein said linking means moves to its non-interposed state when said housing is moved to a vertical position.

63. (Reinstated - twice amended) The gravity-sensitive latch of claim 62, also including:

- a key operated lock operable between a locked position and an unlocked position; and
- a locking structure connected to said lock for movement when said key operated lock is

turned;

wherein said locking structure intercepts said linking transferring means when said lock is in the locked position, whereby said locking structure biases said linking transferring means in its non-interposed position.

64. (Amended) The gravity-sensitive latch of claim 61, wherein said interlocking selectively engaging means is pivotally mounted to said housing.

65. (Amended) The gravity-sensitive latch of claim 64, wherein said linking transferring means is pivotally mounted to said interlocking selectively means.

66. (Amended) The gravity-sensitive latch of claim 65, wherein said manually operated activator structure includes:

- a handle pivotally mounted to said housing;

- biasing means for biasing the handle to an outward position; and

- a flange member rearward projecting from said handle and being sized and positioned to engage said linking transferring means when said handle is manually moved.

67. (Original) The gravity-sensitive latch of claim 66, wherein said pawl is mounted to said housing for rotational movement, said pawl including:

- a pair of forward extending arms for engaging a keeper in a closed position;

- wherein said pawl biasing means biases said pawl to the open position; and

wherein said pawl also includes a rearward projecting arm.

68. (Amended) The gravity-sensitive latch of claim 67, wherein said ~~interlocking~~ selectively engaging means is a retaining arm mounted to pivot on said housing to engage on its free end the rearward projecting arm of said pawl, and wherein said ~~interlocking~~ selectively engaging means biasing means biases said retaining arm to engagement with said pawl thereby retaining said pawl in the closed position.

69. (Amended) The gravity sensitive latch of claim 68, wherein said ~~linking~~ transferring means is a pendulum pivotally mounted to said retaining arm, said pendulum being operable to swing to the interposed position for abutment with said handle flange member, which movement thereby moves the retaining arm away from said retaining engagement with said pawl, whereby said pawl is free to rotate to the open position.

70. (Original) The gravity sensitive latch of claim 69, wherein said pendulum is triangular in shape, having a pivotal connection corner, a weighted corner and a flange abutment corner.

71. (Original) The gravity-sensitive latch of claim 59, wherein said keeper-engaging member is a pawl pivotally mounted to said housing.

72. (Original) The gravity-sensitive latch of claim 71, wherein said linking means is pivotally mounted to said pawl.

73. (Amended) The gravity-sensitive latch of claim 72, wherein said manually operated activator structure includes:

- a handle pivotally mounted to said housing;

- biasing means for biasing the handle to an outward position; and

- a flange member rearward projecting from said handle and being sized and positioned to engage said ~~linking~~ transferring means when said handle is manually moved.

74. (Amended) The gravity-sensitive latch of claim 73, wherein said pawl pivotal mounting to said housing is at a first location on said pawl and wherein said linking transferring means pivotal mounting to said pawl is at a second location on said pawl.

75. (Twice amended) The gravity-sensitive latch of claim 74, wherein said linking transferring means pivotal mounting second location is at a first end of said pawl; and wherein said pawl includes a hook at the second end thereof for engaging a keeper.

76. (Original) The gravity-sensitive latch of claim 75, wherein said pivotal mounting at first location on said pawl is adjacent said pivotal mounting at said second location on said pawl.

77. (Amended) The gravity-sensitive latch of claim 76, wherein said linking transferring means is a pendulum pivotally mounted to said pawl at said second location, said pendulum being operable to swing to the interposed position for abutment with said handle flange member, which movement thereby moves the pawl to rotate thereby moving the hook away from its keeper engaging position.

78. (Original) The gravity-sensitive latch of claim 77 wherein said pendulum is triangular in shape, having a pivotal connection corner, a weighted corner and a flange abutment corner.

79. (Twice amended) In a latch, having a housing, a keeper-engaging member associated with said housing, an activator member connected with said housing and movable with respect thereto, and means connected with said housing for connecting said activator member to said keeper-engaging member whereby a movement of said activator member moves said keeper-engaging member, the improvement comprising:

a gravity-sensitive link included in said activator member to said keeper-engaging member connecting means, said gravity-sensitive link moving to dislocate said connecting means connection ~~thereby disconnecting said means of connection~~ of said activator member to keeper-engaging member when said housing is moved into a first position, and said gravity-sensitive link moving to make said connecting means connection ~~means of connection~~ of said

activator member to keeper-engaging member when said housing is moved into a second position.